

Social Media Use: A Driving Force Of Disordered Body Image?

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Introduction:

Body dysmorphic disorder (BDD) is a condition that has been investigated and studied relatively more in the western world. Enrico Morselli, an Italian psychiatrist in 1891, first described this disorder as one in which people perceive themselves as flawed but have no apparent physical deformities and further termed it "Dysmorphophobia"^[1]. According to the Diagnostic and Statistical Manual of Mental Disorders Fifth Edition (DSM-5), individuals with this disorder have recurring, time-consuming, intrusive, persistent thoughts about the perceived flaw in their physical appearance thereby causing significant distress or anxiety. The incessant preoccupation with one's own appearance as severely flawed warrants exceptional measures to hide or fix it. As a result, these individuals engage excessively in time-consuming rituals such as reassurance seeking, mirror gazing, or mental acts like comparing with others^[2] (Vaele D et al). The core beliefs in BDD appear to focus more on the unacceptability of self.

Epidemiological studies have reported a point prevalence of 0.7 to 2.4% of this disorder in the general population and a higher prevalence observed in clinical settings (9-15% in dermatology and 3-16% in cosmetic surgery)^[2]. Notably, some manifestations may be culturally specific; for example studies in Japan often discuss eyelids as an area of concern cosmetically compared to western society.^[3]

With the advent of social networking sites, there has been a wide range of developmental

consequences especially on adolescents and young adults. In this young impressionable population, social media can have a positive influence but also give rise to negative behaviors such as eating habits, thought processes and body image. With an increasing majority around the world using social media, the promotion of a size zero mentality on these platforms is causing impressionable young minds to seek ways to obtain these socially constructed ideals of beauty. The dissatisfaction with their physical appearance and distorted body image lead them to punish their bodies adversely affecting their health and well-being trying to emulate a nearly impossible standard of beauty.

This case series highlights three college students in their early twenties who presented with features of body image disturbances ranging from eating disorders, and bingeing/purging to body dysmorphic disorder. The common feature among all of the students was the daily usage of social media and the virtual percept of their body image.

Case Series:

Case 1

A 22 year old male student from a semi-urban background presented with complaints of excessive concern about the size of his breasts. He explained that he has gynecomastia, which he has seen and learnt about on Instagram. He has also had multiple surgical consultations and various radiological investigations done to rule out gynecomastia. The patient was preoccupied on his perception of the body part and was

requesting to have surgery. Despite repeated reassurance, his distress did not subside. He would change from one surgeon to another asking to have surgical correction. He was also very distressed which caused him to have a lack of concentration in studies. He would avoid hanging out with his friends as he was fearful of being body shamed. After multiple consultations, patient was referred to psychiatry. He was diagnosed as having Body Dysmorphic Disorder and was started on cognitive behaviour therapy (CBT) as per National Institute for Health and Care Excellence (NICE) guidelines. Later a low dose (20mg) of Fluoxetine was added. Patient has been on regular follow up and is showing good improvement.

Case 2

A 21 years old female medical student from an urban background presented with complaints of poor eating habits, excessive dieting and exercising, multiple acts of self-harm, purging behaviour for a duration of 5 years. She also has a history of being overweight in her childhood and has been a victim of bullying. She was often criticised by her parents for her weight which caused her much distress resulting in her participation in sporting activities and exercising to get fit. She would also skip multiple meals and engage in occasional bingeing followed by purging. She sought the help of Instagram and often looked at dieting regimes and fitness videos. She spent much of her time on Instagram following influencers and compared herself to them causing her to feel low. She always felt that she was overweight in comparison to them. Additionally, she had a history of multiple acts of self-harm which she described to have helped her escape the distress of not being perfect. She was diagnosed as body dysmorphic disorder with atypical anorexia nervosa and was started on low dose (10mg) Fluoxetine and CBT. She has been consistent with the treatment and is improving.

Case 3

A 21 year old female student presented to the psychiatry outpatient clinic with complaints of being excessively concerned about the type of food she consumes, exercising excessively, and not being happy with her body shape. She had been using Instagram regularly and uploading videos on a regular basis. She described that society expects her to be a certain way and is therefore feeling distressed about not being able to fulfil these expectations. She has tried some of the intense and erratic weight loss programmes from social media. The patient would fast for days together and not eat more than one meal on most days. She also described that her body shape is not perfect from what she has observed on social media. She engaged in repetitive behaviours such as mirror checking, reassurance seeking, and excessive grooming. Because of this preoccupation and these time-consuming rituals, she was unable to perform well academically. A diagnosis of Body Dysmorphic Disorder was entertained and the patient was started on CBT and low dose (20mg) Fluoxetine a year ago, but has not been consistent with the treatment.

Discussion:

The cases above highlight the influence social media has on individuals' perceptions of themselves. Literature has previously described that the neural systems which underlie decision-making in adolescents mature exponentially during late adolescence and young adulthood. Throughout this period, executive functions develop via the process of pruning and myelination in the frontal and parietal lobes (Luciano, 2013; Paus, 2005). The developing brain of early adolescents is at a heightened sensitivity for affect and reward processing. This includes social rewards, where the nucleus accumbens is responsible for the subjective experience of reward and pleasure.

[Phillips KA et al.^{\[3\]}](#) showed that approximately 13.8% of individuals with atypical depression were found to be associated with comorbid BDD. This finding was supported by [Allen A et al.^{\[4\]}](#) who also found an association with

depression and comorbid BDD. These studies highlighted the bidirectional relationship between these two conditions. In the current case series, we postulate that the patients' preoccupation with their bodies was related to their perceived ideal of beauty based on the social media content they consumed. However, in the current case series, the one common feature present in all the patients was the long hours they spent on social media and the preoccupation they had towards attaining the perfect body.

In India, [Himanshu et al^{\[5\]}](#) reported that when compared to their male counterparts, females show more dissatisfaction with their bodies. Nevertheless, varied areas of concern were found in both sexes. Dissatisfaction regarding height, body fat, facial hair and complexion were expressed by women, whereas males were more concerned with acne, weight, height, hair thinning, and a muscular physique. Even though the areas of concern were different for males and females, both genders were grossly dissatisfied with their overall body image^[5].

Increasing social media influence and increasing screen time was estimated to be a factor in diminishing body image ([Suchert V et al^{\[6\]}](#)). Further, studies have linked Facebook usage with negative mood and higher levels of body image dissatisfaction among women ([Fardouly et al^{\[7\]}](#)). [Engeln et al., 2020^{\[8\]}](#) made the critical observation that Instagram generates more body image dissatisfaction than Facebook, despite the fact that both social media users have reported reduced body satisfaction and higher negative consequences when compared to non-users.

Another study done by [Scott et al.](#), reported that women's opinions about their bodies had high personal significance and drives their attention visually when observing pictures on social media, possibly serving as sources of information to compare themselves with. This is particularly true for image-based platforms like Instagram which runs primarily on the activities of people scrutinising each other's profiles.

[Hilbert et al., 2002^{\[10\]}](#) postulated that "exposure to harmful images online, and negative cognitions, feed into each other, creating a harmful cycle that is difficult for individuals to escape from". The current case series is in accordance with this theory since the patients' perceptions of their body images were highly influenced by the content they viewed on social media sites like Instagram. Although further research is warranted, some studies even hypothesised that exposure to overweight photos would cause downward comparison, which would boost mental health ([Slater et al., 2017^{\[11\]}](#); [Webb et al., 2017^{\[12\]}](#)). Recent times has seen the emergence of a new condition called "snapchat dysmorphia" wherein patients seek surgical consultations attempting to appear as their filtered selves in real life^[13]. This is likely due to the exposure to the abundance of edited images and images with filters which are thought to be more detrimental than unedited images.

Conclusion:

In adolescents and young adults, social media tends to have a negative impact on developing impressionable minds. Our case series highlights the persistent efforts by these patients to correct their perceived defects by seeking multiple consultations from specialists or engaging in disordered eating and excessive exercise. The formation and development of bonds and interaction as well as socialisation between humans is vital to their development in their early years. Awareness and early identification of symptoms and signs of BDD as well as prompt referral to the psychiatrist should be made a priority in dealing with body image disturbances.

Conflict of interest:

There are no conflicts of interest.

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